

ACCESSION NR: AR4042169

S/0274/64/000/005/A068/A068

SOURCE: Ref. zh. Radiotekhnika i elektronika i elektronika svyaz'. Svedny'y tom, Abs. 5A378

AUTHOR: Perel'man, L. S.

TITLE: A more precise definition of the theory of wave propagation along a long multiwire line in connection with certain technical questions

CITED SOURCE: Izv. N.-i. in-ta postoyan. toka, sb. 10, 1963, 103-120

TOPIC TAGS: wave propagation, electromagnetic wave, multiwire line

TRANSLATION: Propagation of electromagnetic waves is investigated along a multiwire line located above the ground. During the analysis it is assumed that: 1) the multiwire line consists of n long parallel uniform wires of round section with smooth surface; 2) the ground is uniform; 3) the effect of proximity in the wires and the end effect are insignificant. For determination of the electromagnetic field in the air, ground, and wires, Maxwell equations are used with corresponding boundary conditions. General expressions are obtained for determination of parameters of

Card 1/2

KAYDANOV, F.G. (Leningrad); KOSTENKO, M.V. (Leningrad); PEREL'MAN, L.S.
(Leningrad)

Precise determination of wave parameters and analysis of error in
solving telegraph equations using the example of a two-wire power
transmission line. Elektrichestvo no.3:15-21 Mr '65.
(MIRA 18:6)

112195-66 EWT(1)
ACC NR: AP6011544

SOURCE CODE: UR/0105/66/000/004/0062/0066

AUTHOR: Perel'man, L. S.; Chernobrodov, M. I.

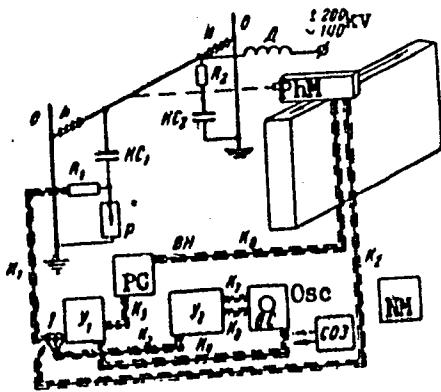
ORG: Scientific Research Institute of Direct Current (Nauchno-issledovatel'skiy B
institut postoyannogo toka)

TITLE: Investigation of positive-corona impulses^{v2} and radio noise from conductors
under actual conditions

SOURCE: Elektriches'tvo, no. 4, 1966, 62-66

TOPIC TAGS: electric corona, corona
discharge, radio noise, electric conductor

ABSTRACT: This outfit (see figure) was used
for studying streamer-corona impulses: a 30-m
length of (14- or 19.6-mm diameter) conductor
was spanned at a height of 1.5 m over the
ground; electric pulses were investigated by
pulse counter PC and oscilloscope "Osc" con-
nected to the conductor via suitable amplifiers;



UDC: 621.315.1.015.532

Cord 1/2

PERELMAN, M.

Potentiometric method of estimation of Urotropin. Ya.
M. Perelman (Leningrad Chem.-Pharm. Inst., Ministry of
Health USSR.). *Avtoraz. Detal 2*, No. 6, 17-22 (1953).
—Titrimetric estn. of Urotropin is difficult in colored solns.
The potentiometer with glass or quinhydrone electrodes
obviates this difficulty. A null instrument was used as gal-
vanometer, the junction was made with the aid of a salt-
satz. agar bridge, 0.1*N* HCl was added in small portions, 1
cc. at a time and reduced to 0.2-0.1 as the balance was being
reached. Thirty sec. after the balance was reached the
e.m.f. was measured with an accuracy of 1 mv. The balance
point is calc'd. according to the max. $\Delta E/\Delta R$. The error,
regardless of whether glass or quinhydrone is used, is 1-1.6%.
With dilns. weaker than 0.025-0.03 mol./l (0.001 cc. the error
may reach 3.5%). The titration proceeds smoothly although
in some cases there is an uneven increase of the potential and
the appearance of a submax. Owing to the prolonged proc.
ess, negligible amt. of H_2CO resulting from cleavage of Uro-
tropin appear which affect the quinhydrone electrode. In
order to counteract this effect the potentials are measured
30 sec. after adding the soln. to be titrated. A. S. M. —

PEREL'MAN, M.

Present indications for surgery in pulmonary tuberculosis. Zdrav.
Belor. 6 no.8:75-76 Ag '60. (MIRA 13:9)
(TUBERCULOSIS)

PEREL'MAN, M.

Prominent party member and statesman. Vop. ekon. no.9:158-160
(MIRA 16:9)
S '63. (Kviring, Emmanuil Ionovich, 1888-1937)

PEREINA, M.

"Pathology and treatment of persistence of the arterial canal. Tr. from the Russian",
p. 68 (Analele Romano-Sovietice, Seria Medicina Generala, Series a III-a, v. 6, no. 2,
Mar./Apr. 1953, Bucuresti)

Sc: Monthly List of East European Accessions, Vol. 2, No 9
Library of Congress, September 1953, Uncl.

DERELMAN, M. E.

19 19
1/ Photogeneration of strange particles on protons. V. I.
Mamessakhlisov, G. G., Bagutyan, and M. E. Pereiman,
Zhur. Eksppl. i Teorii, No. 34, 195-7 (1968). — The reactions
for the photogeneration of strange particles on protons with
the emission of charged K mesons was studied. The cross
sections were calc'd. for the reactions: $\gamma + p \rightarrow \Lambda^0 +$
 K^+ ; $\gamma + p \rightarrow \Sigma^0 + K^+$. The angular distribution was
determ'd. for the K mesons.
J. Rovtar Leach

Rmt

Distr: 423d/4E3c

PEREL'MEN, M.Ya.

Metod E.G. Galerkina v variatsionnom isschislenii i v teorii uprugosti. Prikl. matem.
i mekh., 5 (1941), 345-358.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.,
Markushevich, A.I.,
Rashevskiy, P.K.
Moscow-Leningrad, 1948

NATRADZE, D.A.; PEREL'MAN, M.I., dotsent

Catheterization with occlusion of the pulmonary artery as a method for the temporary arrest of pulmonary hemorrhage before pulmonary resection in tuberculosis. Khirurgia no.1:93-96 '62.

(MIRA 15:11)

1. Iz otstreleniya patologii i khirurgii malogo kruga krovoobrazcheniya (zav. - dotsent M.I. Perel'man) Instituta eksperimental'noy biologii i meditsiny (dir. - prof. Ye.N. Meshalkin) Sibir'skogo otstreleniya AN SSSR i Moskovskoy klinicheskoy tuberkuleznyy bol'nitsy "Zekhar'ino" (glavnnyy vrach V.P. Petrik).

(PULMONARY ARTERY) (TUBERCULOSIS) (HEMORRHAGE)

PEREL'MAN, M. I., Cand. Med. Sci.

Dissertation: "Clinical and Anatomical Data Concerning Yeriche's Operation on a Hip Artery." First Moscow Order of Lenin Medical Inst., 24 Nov 47.

SO: Vechernaya Moskva, Nov, 47 (Project #17836)

Claiv Surgery and Topographical Anatomy

PEREIMAN, M. I.

"Resection of a Vascular Cluster in Spontaneous Seangrene," Khirurgiya, No. 1, 1948.

Yaroslavl' State Med. Inst., Clinic of nos. 1 Surgery, (1948)
Chair Surgery and Topographic Anatomy (1944)

PEREL'MAN M. I.

"A Review of N. Ye. Dudko's Book, Perforative

Ulcer of the Stomach and Duodenum and Suture,"

Ibid, No. 4, 1948.

Khiruegiya,

PEREL'MAN M. I.

"Problem of Surgical Treatment of Ruptured
Traumatic Aneurism of the General Iliac Vessels," *Khirurgiya*,
No. 6, 1948. Clin. of Faculty Surgery,
Belorussian Med. Inst. -c1948-. ✓

PETROVSKY, M. I.

"Osteo Plastic Resection of Ankylosed Knee-Joint," Sov. Med., No. 2, 1949.

PEREL'MAN, M. I.

PA 45/49790

USSR/Medicine - Biographies
Medicine - Surgery

Apr 49

"In Honor of Aleksandr Vladimirovich Tikhonovich,
M. I. Perel'man, 2 $\frac{1}{2}$ pp

"Khirurgiya" No 4

Born in Khar'kov in 1876, Tikhonovich received his medical education chiefly at Khar'kov and Moscow universities. He occupied several chairs of operative surgery and was active in establishing first X-ray consulting room in Moscow. He took an active part in the first days of the Soviet regime, and entered VKP(b) in 1940. He has

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USSR/Medicine - Biographies (Contd) Apr 49

received the "Badge of Honor" and two medals for work with war casualties.

45/49790

PEREL'MAN, M. I.

33560. Operativnyye Dostupy K Arterial'nomu (Rotallovo) Protoku. Khirurgiya, 1949, No. 10,
c. 12-20

so: Letop's'nykh Statey, Vol 45, Moskva, 1949

PERELMAN, M.I.

Method of pseudo-meals for the determination of radical effects of vagotomy in surgical clinic. Khirurgiia, Moskva, No.5:29-31 May 50.
(CLML 19:4)

1. Of the Department of Operative Surgery and Topographic Anatomy (Head — Honored Physician RSFSR Prof. A.V.Tikhonovich) and of the Clinic of Hospital Surgery (Head — Prof. I.M.Perel'man), Yaroslavl' Medical Institut.

PEREL'MAN, M. I.

Ductus Arteriosus

Pathology, clinical aspects, and theory of patent ductus arteriosus. Klin med. 32 No. 3, 1952.

§. Monthly List of Russian Accessions, Library of Congress, September 1953² Unclassified

PEREL'MAN, M.I.; KEDINOVA, G.A. (g. Shcherbakov)

Open pneumolysis through wide thoracotomy in pulmonary tuberculosis.
Khirurgija no.9:67 S '54.

(MLRA 7:12)

(COLLAPSE THERAPY,
pneumonolysis, open through wide thoracotomy)

PEREL'NICA M.I.

KHIAZHINA L.I.,; PEREL'MAN, M.I., kandidat meditsinskikh nauk, Shcherbakov, Volzhskaya nab., d. 17, kv.26.

Local anesthesia in amputation of a lower extremity with half of the pelvis. Vest.khir. 75 no.5:112-115 Je '55 (MLRA 8:10)

1. Iz Bol'nichnogo gorodka g. Shcherbakova (glavn.vrach N.Ye. Banina)

(ANESTHESIA, LOCAL,

in amputation, high pelvic)

(AMPUTATION, anesthesia and analgesia,
local, in high pelvic amputation)

(PELVIS, surgery.
high pelvic amputation, local anesth. in)

PEREL'MAN, M.I., kandidat meditsinskikh nauk; TSVETKOVA, T.A., studentka
V kurse.

Artificial hypothermic technique for the prevention of spinal
paralysis in prolonged ligation of the thoracic artery.
Khirurgia, no.9:34-37 S '55. (MLRA 9:2)

1. Iz kafedry operativnoy khirurgii i topograficheskoy anatomii
(zav. - prof. V.V. Kovanov) i Moskovskogo ordena Lenina
meditsinskogo instituta.

(AORTA, surg.

exper. prolonged occlusion, prev. of spinal paralysis by
method of artif. hypothermia)

(PARALYSIS,

spinal, in exper. prolonged occlusion of thoracic aorta,
prev. by method of artif. hypothermia)

Perel'man, M.I.
PEREL'MAN, M.I.; MARKELOVA, V.V.

Diagnosis of invagination of the jejunum through a gastroenteroanastomosis into the stomach. Sov.med. 21 Supplement:22 '57.
(MIRA 11:2)

1. Iz khirurgicheskogo otdeleniya Bol'nichnogo gorodka g. Shcherbakova.
(INTESTINES--INTUSSUSCEPTION)
(JEJENUM--SURGERY)

PEREL'MAN, M.I.. kandidat meditsinskikh nauk (Yaroslavl' - Shcherbakov)

Method and technic of ligation of patent ductus arteriosus [with
summary in English]. Khirurgia 33 no.4:31-36 Ap '57. (MLRA 10:7)
(DUCTUS ARTERIOSUS, PATENT, surg.
ligation, technic)

PEREL'MAN, M. I.

GERASIMENKO, N.I., doktor med.unuk, PEREL'MAN, M.I.

"Surgical anatomy of the pulmonary vessels" by V.M. Sergeev.
Reviewed by N.I. Gerasimenco, M.I. Perel'man. Probl.tub. 36
(MIRA 11:?)
no.4:123 '58
(LUNGS--BLOOD SUPPLY)
(SERGEV, V.M.)

PEREL'MAN, M.I.; IOFFE, F.M.

Indications for the use of artificial hypothermia in lung surgery.
Akt. vop. obezbol. no.2:131-143 '59. (MIRA 14:5)

1. Iz kafedry tuberkuleza (zaveduyushchiy - prof. A.Ye.Rabukhin)
TSentral'nogo instituta usovershenstvovaniya vrachey i khirurgi-
cheskogo otdeleniya 3-y Moskovskoy klinicheskoy tuberkuleznoy
bol'nitsy "Zakhar'ino" (glavnnyy vrach - V.P.Petrik).
(LUNGS-SURGERY) (HYPOTHERMIA)

PEREL'MAN, M.I.; BOGUSLAVSKAYA, T.B.

Surgical treatment of bronchial fistulas following pneumonectomy.
(VIRU 17:9)
Akt. vop. tub. no.2:169-175 '63.

PERELMAN, M. I.; DANTSIN, N.A.

Lung resection in pulmonary tuberculosis and diabetes. Act. Vol.
(VINA 17:9)
tub. no. 2:201-206 '63.

PEREL'MAN, M.I., dots.

Tracheostomy in certain serious complications of operations
on the lungs. Khirurgia 35 no.6:89-92 Je '59.
(MIRA 12:8)

1. Iz kafedry tuberkulezga (zav. - prof.A.Ye.Rabikhin) TSentral'-
nogo instituta usovershenstvovaniya vrachey (dir. - prof.V.P.
Lebedeva) i khirurgicheeskogo otdeleniya 3-y Moskovskoy gorodskoy
klinicheskoy tuberkuleznoy bol'nitsy "Zakhar'ino" (glavnnyy vrach
V.P.Petrik).

(LUNGS, surg.
postop. resp. compl., ther., tracheostomy
(Rus))

(TRACHEA, surg.
tracheostomy for postop. resp. compl. of
pulm. surg. (Rus))

SHEKHTER, I.A.; PEREL'MAN, M.I.; ASTRAKHANTSEV, F.A.; UPITER, M.Z.

Angiopulmonography in surgery of pulmonary tuberculosis. Khirurgia
35 no.9:57-63 '59. (MIKA 13:12)
(LUNGS—BLOOD SUPPLY) (ANGIOGRAPHY)
(TUBERCULOSIS)

PEREL'MAN, M.I., dotsent

Radical operation in primary tuberculosis with a chronic course
with perforation into the bronchus of caseous lymph node. Probl.
tub. 37 no.4:105-107 '59. (MIRA 12:10)

1. Iz kafedry tuberkuleza (zav. - prof.A.Ye.Rabukhin) TSentral'-
nogo instituta usovershenstvovaniya vrachey (dir. V.P.Lebedeva)
i khirurgicheskogo otdeleniya klinicheskoy bol'ницы "Zakhar'ino"
(glavnyy vrach V.P.Petrik).

(PNEUMONECTOMY, in various dis.
radical operation in primary tuberc. with perf.
of caseous lymph node into bronchus (Bus))

EXCERPTA MEDICA Sec 9 Vol 13/11 Surgery Nov 59

6627. PATHOGENESIS AND PREVENTION OF BRONCHIAL FISTULAE AFTER PNEUMONECTOMY FOR TUBERCULOSIS (Russian text) - Perelman M. I. and Aingorn N. M. - VESTN. KHIR. 1959, 82/1 (62-68) Tables 1-2

Among 203 lung resections in tuberculous patients there were 14 instances of bronchopleural fistula formation, with one fatal outcome. Infiltrative or infiltrative-ulcerous tb of the severed bronchus, a residual cavity empyema and faulty technique of bronchial stump closure were followed by this pathological evolution. There were no post-operative complications when lymphoid cellular infiltration and tubercles were present in the bronchial submucous layer. The suturing of the bronchial stump with thick, non-absorbable sutures favours the appearance of the suture line suppuration, results in 'suture granuloma' and cutting through of threads into the bronchial lumen, and presents an uneventful healing. A policy of empyema prevention, preoperative treatment of bronchial tb, a proper technique of bronchial stump management and use of thin or slowly dissolving ligature is advocated. (IX, 15*)

LEVITIN, F.I., prof., red.; MODEL', L.M., prof., red.; PEREL'MAN, M.I.,
dotsent, red.; PETRIK, V.P., red.

[Current problems in tuberculosis] Aktual'nye voprosy tuber-
boleza. Pod red. F.I. Levitina i dr. Moskva, 1960. 261 p.
(MIRA 13:12)

M. Moscow. TSentral'nyy institut usovershenstvovaniya vrachey.
(TUBERCULOSIS)

PEREL'MAN, M.I., dotsent (Moskva, G-19, B Afanas'yevskiy per., d.36, kv.11);
ASTRAKHANTSEV, P.A.; UPITER, M.Z.

Angiopneumographic method in pulmonary tuberculosis. Vest. rent.
1 rad. 35 no. 4:13-17 Jl-Ag '60. (MIRA 14:2)

1. Iz kafedry tuberkuleza (zav. - prof. A.Ye. Rabukhin) TSentral'-nogo instituta usovershenstvovaniya vrachey. (direktor M.D. Kovrigina), rentgenodiagnosticheskogo otdela (zav. - prof. I.A. Shekter) Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Min'sterstva zdravookhraneniya RSFSR (zav. - dotsent M.I. Perel'man) 3-y gorodskoy klinicheskoy tuberkuleznoy bol'nitsy "Zakhar'ino" (glavnnyy vrach V.P. Petrik).
(TUBERCULOSIS) (ANGIOGRAPHY)

YERKEL'MAN, M.I., dotsent

Single-stage radical surgery in extrapleural empyemas. Probl.
tub. 38 no.8:93-97 '60. (MIRA 14:1)

I.e. Iz kafedry tuberkuleza (zav. - prof. A.Ye. Rabukhin) TSentral'-
nogo instituta usovershenstvovaniya vrachey (dir. V.P. Lebedeva)
khirurgicheskogo otdeleniya 3-y Moskovskoy klinicheskoy tuberku-
leznoy bol'nitsy "Zakhar'ino" (glavnnyy vrach V.P. Petrik)
(LUNGS—SURGERY)

PEREILMAN, M. I., dots.

Prevention and therapy of respiratory insufficiency after pulmonary resection. Khirurgiia, Sofia 14 no.5/6:465-474 '61.

1. Institut po eksperimentalna biologija i meditsina na Sibirskoto otdelenie na AN na SSSR.

(PNEUMONECTOMY compl)

PEREL'MAN, M.I.

Tracheostomy for prophylaxis and therapy in respiratory insufficiency
following lung surgery. Vop. pat. i reg. org. krov. i dykh. no.1:309-
320 '61. (MIRA 18:7)

PEREL'MAN, M.I.; FEOFILOV, G.I.

Some essential problems of bronchoscopy in childhood. Grad. Khir.
6 no.4:88-91 Jl-Ag '64. (MIRA 18:4)

1. Institut eksperimental'noy biologii i meditsiny Ministerstva
zdravookhraneniya RSFSR, Novosibirsk. Adres Perel'mana: Moskva,
B.Pirogovskaya, d.2/6, Institut eksperimental'noy i klinicheskoy
khirurgii.

SHEKHTER, I.A., prof.; PEREL'MAN, M.I., dotsent; ASTRAKHANTSEV, F.A.;
UPITER, M.Z.

Diagnostic significance of angiopulmonography in tuberculosis
of the lungs. Vest. rent. i rad. 37 no.5:17-21 S-0 '62.
(MIRA 17:12)

1. Iz kafedry tuberkuleza (zaveduyushchiy - prof. A.Ye. Rabukhin)
TSentral'nogo instituta usovershenstvovaniya vrachey i rentgeno-
diagnosticheskogo otdela (zaveduyushchiy - prof. I.A. Shekhter)
Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiolog-
icheskogo instituta i khirurgicheskogo otdeleniya (zaveduyushchimiy-
dotsent M.I. Perel'man) 3-y Moskovskoy klinicheskoy tuberkuleznoy
bol'nitsy "Zakhar'ino" (glavnnyy vrach V.P. Petrik). Adres avtora:
Novopeschanaya ulitsa, dom 3, kvartira 46.

RABUKHE, A. Ye. (Moskva, Leningradskiy prospekt, 75-a, kv.56);
PEREL'MAN, M.I.; ALEXSEYEVA, V.M.; GARGOLOVA, T.O.; ZOROCHOVA,
Ye.N.; IOFFE, F.M.; LEVITIN, F.I.

Significance of compound treatment in the effectiveness of
surgical interventions in pulmonary tuberculosis. Vest. khir.
(MIRA 18:1)
92 no.4:28-32 Ap '64

1. Iz kafedry tuberkuleza TSentral'nogo instituta usovershen-
stvovaniya vrachey (rektor - M.D. Kovrigina) bol'nitsy Mi-
nisterstva putey soobshcheniya (glavnnyy vrach - A.A.Potsube-
yenko) i klinicheskoy bol'nitsy "Zakhar'ino" (glavnnyy vrach
V.P.Petrik).

NOVIK, M.G. (Novosibirsk, Akademicheskaya ul., d.2-b, kv.2); FEOFILOV, G.L.;
SHERDUKALOVA, L.F.; AZBEL', D.I.

Clinical aspects of anesthesia in bronchial examinations. Vest. khir.
(MIRA 17:12)
92 no.3:116-121 Mr '64.

1. Iz anesteziologicheskogo otdeleniya (zav. - Ye.I.Stadnikova),
legochnogo otdeleniya (zav. - dotsent M.I.Paral'man) i laboratori
klinicheskoy fiziologii (zav. - T.S.Vinogradova) Instituta eksperi
mental'noy biologii i meditsiny (dir. - prof. Ye.N.Meshalkin)
Sibirskogo otdeleniya AN SSSR.

MESHALKIN, Ye.N., prof.; PEREL'MAN, M.I.

Resection of bronchi with the formation of interbronchial
and bronchotracheal anastomoses. Khirurgija 38 no.12:3-9
D '62. (MIRA 17:6)

1. Iz Instituta eksperimental'noy biologii meditsiny (direktor -
prof. Ye.N. Meshalkin) Sibirskogo otdeleniya AN SSSR.

PEREL'MAN, M.I. (Novosibirsk 72, Mikrorayon "V", d.2., kv.7)

Immediate and remote results of lung resection in tuberculosis.
Grudn. khir. 5 no. 3:64-70 My-Je'63 (MIRA 17:1)

1. Iz lechebnogo khirurgicheskogo otdeleniya (zav. M.I.Perel'man)
Instituta eksperimental'noy biologii i meditsiny (dir. - prof.
Ye.N.Meshalkin) Sibirs'kogo otdeleniya AN SSSR i kafedry tuberkuloza
(zav. - zasluzhennyy deyatel' nauki prof. A.Ye. Rabukhin)
TSentral'nogo instituta usovershenstvovaniya vrachey.

PEREL'MAN, M.I.; UPITER, M.Z.; BUSHUYEVA, V.M., red

[Angiography of the lungs in tuberculosis] Angiografiia
legkikh pri tuberkuleze. Novosibirsk, Izd-vo Sibirskego
otd-niya AN SSSR, 1963. 145 p. (MIRA 17:5)

PEREL'MAN, M. I.; BUSHUYEVA, V.M., red.; MAZUROVA, A.F., tekhn. red.;
VIALYKH, A. M., tekhn. red.

[Lung resection in tuberculosis] Rezektaiia legkikh pri tu-
berkulze. Novosibirsk, Izd-vo Sibirskogo otd-niya AN SSSR,
1962. 371 p. (MIRA 16:4)
(TUBERCULOSIS) (LUNGS—SURGERY)

BRAUDE, V.I.; PEREL'MAN, M.I.; UPITER, M.Z.

Clinical roentgenological and pathomorphological analysis of
101 pulmonary tuberculosis. Vest.khir. 87 no.11:67-71 N '61.
(MIRA 15:11)
1. Iz Moskovskoy gorodskoy klinicheskoy tuberkuleznoy bol'nitsy
No.3 "Zakhar'ino" (gl. vrach - V.P. Petrik).
(TUBERCULOSIS)

PEREL'MAN, M. I.; OTSUP, L. N. (Moskva, Pokrovskiy bul'var, d. 16/10,
kv. 10)

Analysis of the divergencies between planned and factually performed
extent of resection of the lungs in tuberculosis. Grud. khir. no.5:
(MIRA 15:2)
64-68 '61.

1. Iz khirurgicheskogo otdeleniya (rukovoditel' - dotsent M. I.
Perel'man) klinicheskoy bol'nitsy "Zakhar'ino" (glavnnyy vrach
V. P. Petrik)

(TUBERCULOSIS) (LUNGS—SURGERY)

PEREL'MAN, M.I. (Novosibirsk, Akademgorodok, 2-V, kv.7); SHULUTKO, M.L.

Characteristics of the technique of surgical interventions
in primary pulmonary tuberculosis. Vest. khir. 92 no.2:
47-50 F '64. (MIRA 17:9)

1. Iz legochnogo otdeleniya (zav.-dotsent M.I. Perel'man)
Instituta eksperimental'noy biologii i meditsiny (dir.-
prof. Ye.N. Meshalkin) Sibirskogo otdeleniya Akademii nauk
SSSR i khirurgicheskogo otdeleniya (zav.-starshiy nauchnyy
sotrudnik M.L. Shulutko) Sverdlovskogo nauchno-issledovatel'-
skogo instituta tuberkuleza (dir.- prof. I.A. Shakleyn).

PEREL'MAN, M.M. (Moskva)

Preparation of liquid medicinal mixtures with ingredients of
varying wettability. Apt.delo 9 no.2:44-45 Mr-Ap '60.
(MIRA 13:6)

(PHARMACY)

PEREL'MAN, M. M.

BH

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101 AND 200 UNCLASSIFIED
PROCESSES AND PROPERTIES INDEX

Analysis of black printing inks. M. M. Perel'man and
N. V. Fedorova. *Tekhnol. Promstvno* 1937, No. 12, 24-
8; *Chem. Zentr.* 1938, II, 1493.—A method is given for the
analysis of black printing inks manufd. with a base of
varnish of petroleum origin. First, the binding material
is removed by repeated extn. with petr. ether in the pres-
ence of 80% HOAc by use of a centrifuge operating at
2000 r. p. m. The indulin is sep'd. from the lampblack
by suspending the mixt. in HOAc and centrifuging. This
is repeated 5-6 times with fresh portions of the acid.
Finally, the resin is extd. from the lampblack with CHCl₃.
W. A. Moore

PEREL'MAN, M.M. (Moskva)

Quick method for determining the specific gravity of mineral and animal
waxes and hard fats. Apt. de lo 5 no. 6:42-44 N-D '56. (MIRRA 10:1)
(OILS AND FATS) (WAX) (SPECIFIC GRAVITY)

PEREL'MAN, M.M.

Determination of rheologic properties of certain drugs. Apt.
delo 3 no.3:53-54 My-Je '54. (MLRA 7:6)

1. Rukovoditel' issledovatel'skoy gruppy TsKAL Moskovskogo gorod-
skogo otdeleniya glavnogo aptechnogo upravleniya RSFSR.
(DRUGS,
*flow characteristics, determ.)

PENK'L'MAN, M.M. (Moskva)

Effect of temperature on the coefficient of refraction of medicinal
solutions. Apt. deko 3 no.4:47-49 Jl-Ag '54. (MIRA 7:8)

(SOLUTIONS,

*eff. of temperature on coefficient of refraction of
medicinal colutions)

(DRUGS,

*eff. of temperature on coefficient of refraction of
medicinal solutions)

(TEMPERATURE, effects,

*on coefficient of refraction of medicinal solutions)

26
CA

Analysis of black printing inks. M. M. Petruyan and
N. V. Fedorova. *Voprosy Promst. Tsvetn. Tint. i Druk.* 1937, No. 12, 24
S. Chem. Zem. 1938, II, 196. A method is given for the
analysis of black printing inks (mainly with a base of
varnish of petroleum origin). First, the binding material
is removed by repeated extraction with petro-ether in the pres-
ence of 80% HClAc by use of a centrifuge operating at
2000 r. p. m. The residue is sepd from the lampblack
by suspending the mixt in HClAc and centrifuging. This
is repeated 5-6 times with fresh portions of the acid.
Finally, the resin is exd from the lampblack with C14C.
W. A. Moore

Pere Man, M.M.

Effect of temperature upon refractive index of medicinal preparations. M. M. Petrel'yan. *Apotekar Dals* 3, No. 4, 47-4 (1954).—A correction of this is necessary whenever the temp. of the soln. differs from 20°. 0.0001 is to be deducted from the value for every degree above and added for every degree below 20°. A. S. Mirkin

MAMASAKHLISOV, V.I.; MATINYAN, S.G.; PEREL'MAN, M.Ye.

Photoproduction of strange particles by protons [with summary in English]. Zhur. eksp. i teor. fiz. 34 no.1:195-197 Ja '58.
(MIRA 11:5)

1. Institut fiziki Akademii nauk Gruzinskoy SSR.
(Particles, Elementary)
(Nuclear reactions)

L 36119-66 EWT(d) IJP(c) 6D
ACC NR: AT6017548

SOURCE CODE: UR/0000/65/000/000/0034/0048

26
23
R-1

AUTHOR: Perel'man, M. Ye.

ORG: None

TITLE: Contribution to the theory of integral relations of the Hilbert transformation type

SOURCE: AN GruzSSR, Institut kibernetiki, Kiberneticheskiye modeli (Cybernetic models). Tiflis, Izd-vo Metsniyereba, 1965, 34-48

TOPIC TAGS: integral relation, mathematic transformation, Fourier transform

ABSTRACT: The author investigates a method of constructing multidimensional integral relations of the Hilbert type. The method starts with the writing of Hilbert transformations as Fourier-convolutions of a function with a sign operator. This approach is shown to be not too rigid and makes the generalization to the case of many variables difficult. The present author develops a general method from which, in particular, follow the results of O. A. Varsavsky (Sobre la transformation de Hilbert. Rev. Un. Mat. Argentina, 14, 20, (1949)). The geometrical (or physical) significance of problems is then examined for which integral relations are constructed for the function of one variable and examples of functions of many variables. Several similar integral transformations are also investigated.

L 36119-66

ACC NR: AT6017548

3

It is noted that the method developed may, in some cases, aid in the conversion or determination of the significance of integral equations. The discussion presented does not aspire to mathematical rigidity and is basically applicable in nature. In conclusion, the author considers it his pleasant duty to express deep gratitude to V. V. Chavchanidze for support and constant interest in the work, to I. N. Kartsiadze, and participants in the seminar of Academician N. P. Vekua for useful discussions at the early stages of the work. Orig. art. has: 43 formulas.

SUB CODE: 12 / SUBM DATE: 09Aug65 ORIG REF: 007 OTH REF: 011

Cont 2/2 116

L 35917-66 EWT(d)/T/EWP(1) IJP(c) GD
ACC NR: AT6017549

SOURCE CODE: UR/0000/65/000/000/0049/0071

AUTHOR: Perel'man, M. Ye.

ORG: None

TITLE: Limiting conditions and integral representations in information theory
and physics

SOURCE: AN GruzSSR. Institut kibernetiki. Kiberneticheskiye modeli (Cybernetic models). Tiflis, Izd-vo Metsniyereba, 1965, 49-71

TOPIC TAGS: information theory, physics, integral relation, black box, Green function

ABSTRACT: The author applies methods developed earlier (K teorii integral'nykh sootnosheniy tipa preobrazovaniya Gil'berta. [Kiberneticheskiye modeli. Tiflis, Izd-vo Metsniyereba, 1965, 34-48]) to some problems in physics and information theory. The approach is examined for the "black box" problem and the construction of a closed system of nonrelativistic Green's functions in macroscopic physics. It is noted that, although the Hilbert transform device was used in various problems in information theory, physics, and electronics, its application was restricted to functions of one variable, i.e., to the Kramers-Kronig formula. The method developed, however, makes it possible to construct multiple and multidimensional

Card 1/2

Card 2/2 lll

L 3820-66 EWT(1) IJP(c) GG/GD

ACC NR: AT6017550

SOURCE CODE: UR/0000/65/000/000/0072/0085

AUTHOR: Perel'man, M. Ye.

ORG: none

TITLE: Relativistic dispersion relations

SOURCE: AN GruzSSR, Institut kibernetiki. Kiberneticheskiye modeli (Cybernetic models). Tiflis, Izd-vo Metsniyereba, 1965, 72-85

TOPIC TAGS: quantum field theory, field theory, relativity theory, Fourier transform

ABSTRACT: The aim of the axiomatic approach in classical and quantum field theory is the maximum use of the fundamental postulates of the theory in order to obtain relations which can be checked experimentally. However, despite the existence of several distinguishable methods, there are still no effective methods of constructing and proving general relativistic relations which do not make use of arbitrary assumptions having no physical foundation. The present author attempts to avoid the introduction of any additional assumptions and to construct, on the basis of a method described earlier, a spectral representation and dispersion relations for functions of a four-dimensional variable. The author uses only the general requirements of the theory (causality, relativism, and mass spectra) and assumptions on the existence of

Cord 1/2

L 36120-66

ACC NR: AT6017550

Fourier transforms without specifying the number and type of possible deductions. The relations obtained are generalizations of the formulas of Kramers-Kronig relations and the Källen-Lehmann and Dyson representations. Particular cases corresponding to known concepts are examined. The relationship of the integral relations obtained to equations of motion is investigated. The Fourier transforms of the more important discontinuity functions are calculated and their relationships with singular functions of field theory are discussed. The author considers it his pleasant duty to express deep gratitude to V. V. Chavchanidze for useful discussions and support in the work, and to N. M. Poliyevktov-Nikoladze, K. A. Ter-Martirosyan, and V. Ya. Faynberg for interesting discussions in the early stages of the work. Orig. art. has: 43 formulas.

SUB CODE: 20 / SUEM DATE: 09Aug65 / ORIG REF: 013 / OTH REF: 013

Card 2/2 *lll*

MARTINYAN, S.G.; PEREL'MAN, M.Ye.

Generalized Ward equality for electromagnetic transitions between
various particles. Soob. AN Gruz. SSR 32 no. 2:301-305 '63.

(MIRA 18:1)

1. Institut fiziki i Institut kibernetiki AN Gruzin'skoy SSR. Submitted
February 19, 1962.

AUTHORS: Chavchanidze, V. V., Perel'man, M. Ye. SCV/On 1/12/1986

TITLE: On the Theory of the Neutrino (K teorii neutrino)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1977,
Vol. 35, Nr 1, pp. 296 - 298 (USSR)

ABSTRACT: This paper demonstrates that all the experimental results described by the two-component theory (Ref 1) may be explained without the introduction of a longitudinal unsymmetric neutrino. The authors suggest that this hypothesis be replaced by the assumption that a quantum mixture of 2 light neutral Dirac (Dirak) particles flies off in the β -, μ , and π -decays. These Dirac (Dirak) particles have opposite parities. The relation between them is that of particle and antiparticle and therefore a new rule for the conjugation particle- antiparticle is introduced. For the sake of simplicity the authors investigate only the β -decay which is characterized by the Hamiltonian

Card 1/3
$$H = \sum_{i=1}^5 c_i (\bar{\psi}_n \psi_p)(\bar{\psi}_e \psi_i \Phi). \text{ In the two-component theory there is } \Phi \rightarrow \Phi(\pm) = (1 \mp \gamma_5) \psi_\nu / \sqrt{2} = (\psi_\nu \mp \gamma_5 \psi_\nu) / \sqrt{2}, \text{ and the authors}$$

On the Theory of the Neutrino

SOV/56-35-1-1c 59

for the sake of definiteness put $\psi_{\nu} = \psi_{\bar{\nu}}$. The authors' hypothesis may be reduced to the hypothesis that $\psi_{\bar{\nu}}(E) = \psi_{-(E)} = -\gamma_5 \psi_{\nu}(E)$ behaves like the wave function ψ_{ν} , whereas $\psi_{\bar{\nu}} = \psi_{\nu}(E)$ is the wave function ψ . For a neutrino the transition from $[\vec{p} + E]\psi_{\nu}(E) = 0$ to the corresponding equation for the antiparticle $[\vec{p} - E]\psi_{\bar{\nu}}(E) = 0$ may be carried out by means of the above mentioned relation. The wave function of the real antiparticle is different from zero also in the non-relativistic limit. According to the above-mentioned relation, the Hamiltonian mentioned in the beginning of this paper with $\Phi(t) = (\psi_{\nu} \pm \psi_{\bar{\nu}})/\sqrt{2}$ gives the same cross sections of the decay phenomena as in the two-component theory. The asymmetry of the decays is not interpreted as a consequence of the properties of any particle, but as a consequence of the properties of interaction itself, i.e. - of the non-conservation of the lepton charge. The selectivity of the interaction is expressed by the choice of the phase factor of the quantum mixture which flies away. The author expresses his thanks to V.I.Mamasakhlisov for his useful discussions and for his

Card 2/3

On the Theory of the Neutrino

SOV [REDACTED]

interest in this paper. There are 5 references, 3 of which are Soviet.

SUBMITTED: December 24, 1957

Card 3/3

MATINYAN, S.G.; PEREL'MAN, M.Ye.

Abnormal connection between spin and statistics. Soob. AN Gruz.
SSR 27 no.1:25-32 Jl '61. (MIRA 16:8)

i. AN GruzSSR, Institut fiziki, Tbilisi. Predstavлено членом-
корреспондентом АН ГрузССР В.И.Мамасахлисовым.
(Particles (Nuclear physics))

24 (5)

AUTHOR:

Perel'man, M. Ye.

SOV/56-35-2-29/60

TITLE:

Concerning the Theory of the Compound Neutral Pions
(K teorii sostavnykh π^0 -mezonov)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol 35, Nr 1 (7), pp 508-509 (USSR)

ABSTRACT:

Nowadays it is generally assumed that pions exist part of the time in the form of virtual baryon-antibaryon pairs. This means that the pions exist, at least for part of the time (according to the Fermi-Yang model, (Ref 1) for the whole time) as closely coupled nucleon-antinucleon pairs.

If the pions from an isotopic triplet, $\pi^+ = p\bar{n}$,
 $\pi^0 = (p\bar{p} + n\bar{n})/\sqrt{2} = (\pi_1 + \pi_2)/\sqrt{2}$, $\pi^- = n\bar{p}$ is obtained.

Recent papers (Refs 2, 3) dealt with the possible existence of isotopic singlets which, in the theory of the compound particles, are represented by $\rho^0 = (p\bar{p} - n\bar{n})/\sqrt{2} = (\pi_1 - \pi_2)/\sqrt{2}$. The existence of a Coulomb interaction in the $\pi_1 = p\bar{p}$ - compound implies a certain difference of the

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Concerning the Theory of the Compound Neutral Pions SOV/56-35-2-29/60

properties of the π_1^- and π_2^- -mesons. According to Zel'dovich (Ref 4) the masses of the π_1^- - and π_2^- -compounds are different by $12,7 m_e$, where m_e denotes the electron mass. Evidently, also the lives of these compounds will be different. If in the initial moment there are only negative pions in the beam, and if the corresponding wave function has the form $\Psi(0) = (\pi_1^- + \pi_2^-)/\sqrt{2}$, the amplitudes of the states π_1^- and π_2^- will not be equal in the moment t . This makes it possible to measure the relative phase of the states π_1^- and π_2^- , i. e. the phase of the transition of a neutral pion into a ζ^0 -meson in real or virtual processes. A quickly oscillating term can be neglected in the calculation of the probability of finding neutral pions or ζ^0 -mesons. The above-mentioned considerations lead to a decay scheme of the neutral pions which is characterized by a sum of 2 exponential functions. According to this scheme, in strong interactions (where the total isotopic spin is observed) neutral pions and ζ^0 -mesons are

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Concerning the Theory of the Compound Neutral Pions SOV/56-35-2-23/60

involved, whereas the π_1 - and π_2 mesons are involved in the electromagnetic and weak interactions. Probably this is the cause of the different life times of the mesons which fly away in different processes. Evidently, the above-mentioned phenomena are very similar to those connected with neutral K-mesons. There are 8 references, 3 of which are Soviet.

ASSOCIATION: Institut fiziki Akademii nauk Gruzinskoy SSR
(Physics Institute, AS Gruzinskaya SSR)

SUBMITTED: April 4, 1958

Card 3/3

PEREL'MAN, N.Ye.

Composite model of elementary particles. Trudy Inst. fiz.
AN Gruz.SSR 7:43-57 '60. (MIRA 14:10)
(Particles(Nuclear physics))

PEREL'MAN, M.Ye.

Theory of compound \bar{N} -mesons. Zhur. eksp. i teor. fiz. 35 no.2:
508-509 Ag '58. (MIRA 11:10)

1. Institut fiziki AN Gruzinskoy SSR.
(Mesons)

PEREL'MAN, M. YE.

AUTHORS: Mamasakhlisov, V. I., Matinyan, S. G., 56-1-27/56
Perel'man, M. Ye.
TITLE: The Photo-Production of Strange Particles on Protons
(Fotoobrazovaniye strannykh chastits na protonakh)
PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,
Vol. 34, Nr 1, pp. 195-197 (USSR)
ABSTRACT: The present paper investigates the reactions of photo-
production of strange particles on protons with
emission of charged K-mesons: $\gamma + p \rightarrow \Lambda^0 + K^+$ ($1'$), $\gamma + p \rightarrow \Sigma^+ + K^+$
($1''$). The cross sections of these processes are calculated
in second perturbation theoretical order. The authors here
select the value $1/2$ for the spin of the Λ^0 -hyperon and the
value $3/2$ for the spin of the Σ^0 -hyperon. The proton and the
 Λ^0 -particle shall satisfy the Dirac equation (where the inter-
action of the electromagnetic field with the magnetic
moments of the particles is disregarded) and the Σ^0 -hyperon
is described by the equation of Rarita-Schwinger (Rarita-
-Shwinger) for the particle with spin $3/2$. The direct
interaction of the γ quantum with the nucleon as well as its
interaction with the field of the virtual K mesons are taken
into account here. The authors here investigate the pro-

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The Photo-Production of Strange Particles on Protons

56-1-27/56

cesses of production of K^+ mesons and use the hypothesis of the conservation of parity in the electromagnetic interactions. Therefore the two diagrams given here are the only possible diagrams of the process. The angular distribution of the K^+ mesons is calculated by the usual method and is here written down for the case of the center-of-gravity system. The interaction of the γ quanta with the field of the virtual K^+ mesons furnishes a considerably smaller contribution to the cross section than the direct interaction of a γ quantum with the proton. When the system ($\Lambda^0 K^+$) has the same parity as the proton the angular distribution of the K^+ mesons in the center-of-gravity system is shifted toward larger angles. For that of the parity of the system ($\Lambda^0 K^+$) which is opposed to the parity of the proton, the opposite result is obtained. Then the production of Σ^- -hyperons is investigated. In this case the angular distribution in the center-of-gravity system must be isotropic. The total cross section is here written down on the assumption that the square of the mass of the K -meson can be disregarded with respect to the square of the mass of the Σ -hyperon. The comparison of the results obtained here with the experiment will make possible a solution of the problem.

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The Photo-Production of Strange Particles on Protons

56-1-27/56

of the parity of the system ($\Lambda^0 K^+$) with regard to the proton. There are 1 figure and 6 references, 3 of which are Slavic.

ASSOCIATION: Institute for Physics AN Georgian SSR
(Institut fiziki Akademii nauk Gruzinskoy SSR)

SUBMITTED: July 27, 1957

AVAILABLE: Library of Congress

Card 3/3

24460

38141
S/058/62/000/004/018/160
A058/A101

AUTHORS: Matinyan, S. G., Perel'man, M. Ye.

TITLE: On the anomalous connection of spin and statistics

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 45, abstract 4A350
("Sakartvelos SSR Metsniyerebata Akademiis moambe", 1961, v. 27,
no. 1, 25 - 32, Gruz.; "Soobshch. AN GruzSSR", 1961, v. 27, no. 1,
25 - 32, Russian)

TEXT: The authors examine the possibility of an anomalous connection of spin and statistics (when the field with integral spin is quantized with the aid of anticommutators while the field with half-integral spin is quantized with the aid of commutators) for strange particles. They suggest experiments in setting up K-meson and hyperon statistics and analyze the experimental consequences of anomalous statistics. They show that anomalous statistics lead to violation of the SRT theorem if weak interactions are also included in the investigation.

S. M.

[Abstracter's note: Complete translation]

Card 1/1

L 22251-66 EWT(1)/FSS-2 IJP(c)

AIC NR: AP6010982

SOURCE CODE: UR/0056/66/050/003/0613/0625

34

33

8

AUTHOR: Perel'man, M. Ye.

ORG: Institute of Cybernetics, Academy of Sciences, Georgian SSR
(Institut Kibernetiki Akademii nauk Gruzinskoy SSR)

TITLE: On the theory of dispersion relations. I.

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no.
3, 1966, 613-625

TOPIC TAGS: field theory, quantum field theory, dispersion relation,
~~Mass-spectrality~~

ABSTRACT: The main postulates of field theory, relativistic causality and mass-spectrality, are obtained for the functions of a single four-dimensional variable as a restriction on functional equations. The Fourier convolutions of the equations yield directly the relativistic spectral representations and dispersion relations which generalize and make more concrete the Kramers-Kronig, Kallen-Lehman, and Dyson representations and their inversions. Similar relations are derived in the x-representation. All relations can be written down as equations.

Cont 1/2

2

L 22251-66

ACC NR: AP6010982

of motion in x and p spaces with unspecified interaction. This proves
that the equation of motion method and the dispersion relations theory
are complementary. z/

[cs]

SUB CODE: 20/ SUBM DATE: 06Jul65/ ORIG REF: 013/ OTH REF: 016/

Cord 2/2 nst

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240010012-0

Printed in U.S.A.

Electrification of agriculture Moscow, Gos. tekhn. izd-vo, l. s. 79 c. V
Seriia 5. Inzhenerno-pryizhennaya biblioteka, no. 11-12.

Yudin TK4012. P4

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240010012-0"

NAZAROV, Sergey Ivanovich; PEREL'MAN, Nikolay Mikhaylovich;
STAROVYBORNYY, P.T., red.; ZEN'KO, M.M., tekhn. red.

[In the advanced line; from work practices of rural inventors
and innovators in Mogiloev Province] Na peredovoi linii; iz
opyta raboty sel'skikh izobretatelei i ratsionalizatorov Mogi-
levshchiny. Minsk, Sel'khozgiz BSSR, 1962. 73 p.

(MIRA 15:11)

(Mogilev Province--Agricultural machinery)

PEREL'MAN, P. M.

"Solubility Isotherm and the Solid Phases upon the

System KCl-HgCl₂-H₂O at 100°," Iz. Ak.

Nauk SSSR, Otdel. Khim. Nauk. No. 2, 1941.

PEREL'MAN, R.G. (Moskva); POLIKOVSKIY, V.I. (Moskva)

Profiling of the blades of an axial preliminary pump with
optimum anticavitation qualities. Izv. AN SSSR. Otd. tekhn.
nauk. Energ. i transp. no.3:357-365 My-Je '63.
(MIRA 16:8)

PEREL'MAN, R.G., kandidat tekhnicheskikh nauk.

Atoem engines. Nauka i zhizn' 23 no.1:26-32 Ja '56. (MLRA 9:4)
(Atomic power)

PEREL'MAN, R.G., kandidat tekhnicheskikh nauk.

Atomic icebreakers. Nauka i zhizn' 23 no.4:36 Ap '56. (MLRA 9:7)
(Atomic ships) (Ice-breaking vessels)

POLIKOVSKIY, V.I., doktor tekhnicheskikh nauk; PEREL'MAN, R.G., kandidat tekhnicheskikh nauk.

Determining the load on sluice gates during the inflow at the funnels of solid floating bodies. Gidr.strel.25 no.5:31-35 Je '56. (MIRA 9:9)
(Sluice gates)

PEREL'MAN, R.G., kandidat tekhnicheskikh nauk.

Delivery of fluid through intakes shielded by plates. Trudy MAI
no.74:145-146 '56. (MLRA 10:5)
(Fluid dynamics)

POLIKOVSKIY, V.I., doktor tekhnicheskikh nauk; PEREL'MAN, R.O., kandidat
tekhnicheskikh nauk; IVANOV, Yu.A., inzhener.

On the possibility of reducing the length of an injector.
(MIRA 10:6)
Teploenergetika 4 no.9:23-26 S '67.

1. Moskovskiy aviatcionnyy institut.
(Injectors)

PEREL'MAN, R. G.

(Cand. Mech. Sci.)

"Nuclear Transport," Politekhnicheskoye Obuchenije, Nr. 6, 1957.

TRANS-605414

AUTHOR: POLIKOVSKIY, V.I., PEREL'MAN, R.G. PA - 3086
TITLE: On the Localizing of Local Hydraulic Resistances during an Enforced Pressure Equalization of the Velocity Field. (O lokalizatsii mestnykh gidravlicheskikh soprotivleniy pri prinuditel'nom vyравнивании polya skorostey, Russian)
PERIODICAL: Izvestiia Akad.Nauk SSSR, Otdel.Tekhn., 1957, Vol 21, Nr 3,
pp 163-170 (U.S.S.R.) Received: 6 / 1957 Reviewed: 7 / 1957
ABSTRACT: All hydraulic losses are, in the final analysis, friction- or impact losses. The special property of the latter is that it arises from a sufficiently long area after an element (such as a joint, sudden cross section enlargement, etc.) On this occasion considerable changes of the velocities in the immediate vicinity of this area take place, but this is accompanied by no noticeable pressure losses in the active part of the current. It can be asserted that the impact losses are localized in the mixing area in those cases also when the length is considerably reduced in proportion to the length of the area with a free dispersion.
In order to corroborate this experimental assertion special investigations were carried out in the Laboratory of the MAI, on which

Card 1/2

PA - 3086

On the Localizing of Local Hydraulic Resistances during an Enforced Pressure Equalization of the Velocity Field.

occasion the above mentioned opinion could be fully confirmed.
(4 Illustrations and 6 Citations from Slav Publications).

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED: 15.10.1956
AVAILABLE: Library of Congress

Card 2/2

PEREL'MAN, Rozen Grigor'yevich, kand.tekhn.nauk; NIKOLAYEV, N.A., nauchnyy
red.; LAVINA, L.I., red.izd-va; STRELETSKIY, I.A., tekhn.red.

[Nuclear engines] Ladernye dvigateli. Moskva, Izd-vo "Znanie,"
1958. 54 p. (Vsesoiuznoe obshchestvo po rasprostraneniyu
politicheskikh i nauchnykh znanii. Ser. 4, nos. 4,5) (MIRA 11:5)
(Nuclear engineering)

PEREL'MAN, R.G. (Moskva)

Selection of optimum parameters for the ejector-wheel system of a
pump. Inv. AN SSSR. Otd. tekhn.nauk. Energ. i avtom. no.4:59-73
Jl-Ag '60. (MIRA 13:8)
(Rotary pumps)

S/025/60/000/009/006/007
A166/A029

AUTHOR: Perel'man, R.G., Candidate of Technical Sciences

TITLE: Problems of Magnetic Electrodynamics

PERIODICAL: Nauka i zhizn', 1960, No. 9, p. 36

TEXT: The second Vsesoyuznoye soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamiki (All-Union Conference on Theoretical and Applied Magnetic Hydrodynamics) was held in Riga on June 27, 1960. Among those taking part were Corresponding Member of the Akademiya nauk Latvii (Latvian Academy of Sciences) I.M. Kirko and the Soviet scientists: Academician Ya.B. Zel'dovich and V.I. Veksler; Corresponding Members of the Akademiya nauk (Academy of Sciences) V.L. Ginzburg (Moscow) and G.I. Budker, Director of the Institut fiziki v Sibiri (Institute of Physics in Siberia); Doctors of Science K.P. Stanyukovich, D.A. Frank-Kamenetskiy, M.F. Shirokov, I.A. Akhiyezer, A.I. Vol'dek, etc. Some 150 papers were presented. The main sections of the conference discussed theoretical and experimental magnetic hydrodynamics, the physics of plasma and applied magnetic hydrodynamics, "Plasma electrotechnology", came in for considerable discussion.

Card 1/2

S/025/60/000/009/006/009
A166/A029

Problems of Magnetic Electrodynamics

sion. Another topic was plasma movement at speeds approaching that of light. The results of experiments on electromagnetic pumps capable of pumping liquid metal at temperatures in the order of thousands of degrees were also presented. These pumps would be of great practical importance for metallurgy and power engineering.

Card 2/2

PEREL'MAN, R.G., kand. tekhn. nauk

Choice of an intermediate cooling liquid for a liquid metal cooling stage. Teploenergetika 11 no.6:51-55 Je '64. (MIRA 18:7)

I. Moskovskiy aviationsionnyy ordena Lenina institut im. Sergo Ordzhonikidze.

L 44279-66 EWT(m)/T WW/DJ

ACC NR: AP6005370 (A) SOURCE CODE: UR/0413/66/000/001/0117/0117

INVENTOR: Perel'man, R. G.; Skubachevskiy, G. S.; Polikovskiy, V. I.; Ivanov, G. A.

24

B

ORG: none

TITLE: Hydrostatic bearing. Class 47, No. 177711

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki,
no. 1, 1966, 117

TOPIC TAGS: ~~bearing~~ hydrostatic bearing, bearing stability

ABSTRACT: This Author Certificate introduces a hydrostatic bearing with grooves and a control mechanism for feeding the lubricating fluid to the friction surfaces. For greater reliability and ease of construction the control mechanism is two grooves tapering toward each other whereby the intake groove is more tapered than the outlet groove (see Fig. 1). Orig. art. has: 1 figure.

Cord 1/2

UDC: 621.822.5

PEREL'MAN, R.G., kand.tekhn.nauk; POLIKOVSKIY, V.I., doktor tekhn.nauk

Disk friction pumping machinery as ventilators and blowers. Vod.
i sam. tekhn. no.10:7-8 O '64. (MIRA 18:3)

ACCESSION NR: AP4037639

S/0096/64/000/006/0051/0055

AUTHOR: Perel'man, R. G. (Candidate of technical sciences)

TITLE: Selection of an intermediate liquid coolant for a liquid-metal loop

SOURCE: Teploenergetika, no. 6, 1964, 51-55

TOPIC TAGS: nuclear equipment coolant, liquid metal loop, intermediate coolant, organic coolant, silicone coolant, coolant characteristics, alkali-metal loop

ABSTRACT: A comparative review of the chemical and physical characteristics of conventional organic and silicone intermediate coolants is presented. Basic requirements are outlined for the use of intermediate liquid coolants in liquid-metal-cooled nuclear equipment. The following coolants are discussed: toluene, dowtherm A (diphenyl and diphenyl ether eutectic mixture), diphenyl, and a series of liquid silicones (polysiloxanes). Disiloxanes of the $(C_6H_5)_3SiOSi(CH_3)_3$ type are recommended for use in closed loops at operating

Card 1/2

ACCESSION NR: AP4037639

temperatures up to 200C because of their moderate viscosity and satisfactory heat resistance. A series of laboratory experiments reproducing emergency conditions indicated that disiloxanes do not react with liquid potassium or sodium at temperatures up to 400C. A comparative cost analysis also showed that silicones are more advantageous to use than organic coolants. It is concluded that in most cases silicones are to be preferred as coolants of liquid alkali metals for reasons of safety. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 09Jun64

ENCL: 00

SUB CODE: NP

NO REF Sov: 011

OTHER: 002

Card 2/2

PEREL'MAN, R.G. (Moskva); POLIKOVSKIY, V.I. (Moskva)

Fundamentals of the theory of disc-type pumps. Iss. AN SSSR. Otd. tekhn.
nauk. Energ. i transp. no.1:101-112 Ja-F '63. (MIRA 16:5)
(Pumping machinery)

S/281/63/000/001/004/004
E194/E155

AUTHORS: Perel'man, R.G., and Polikovskiy, V.I. (Moscow)

TITLE: A fundamental theory of the disk-type pump

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniya
tekhnicheskikh nauk. Energetika i transport, no. 1,
1963, 101-112

TEXT: In a disk-type pump the fluid passes radially from the axial inlet between the rotor disks where it is acted upon by frictional and centrifugal forces to the peripheral discharge. Because of rapid advances in pumps with bladed rotors, the disk-type was neglected until a demand arose for pumps of excellent anti-cavitation properties, which a disk pump can have if the rotor disks are secured only at the periphery, leaving the axial inlet clear. The overall efficiency of 50% or less is, however, lower than that of centrifugal pumps, although this also applies to other pumps of comparable anti-cavitation properties. From basic theory, expressions are first derived for the speed of liquid in the gap between disks. An expression for the efficiency is written in the form of the ratio of the energy of the flow on Card 1/2